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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,006	03/02/2004	John T. Moore	4305.2US (99-1251.02/US)	1271

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EXAMINER

TRINH, MICHAEL MANH

ART UNIT PAPER NUMBER

2822

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/791,006	MOORE ET AL.	
	Examiner	Art Unit	
	Michael Trinh	2822	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 0613.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 35-40 is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


Michael Trinh
Primary Examiner

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

*** This office action is in response to Applicant's Amendment filed on June 13, 2005.

Claims 1-40 are pending.

*** The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

*** The terminal disclaimers filed on June 13, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of U.S. Patent Numbers 6,699,743 and 6,458,663 have been reviewed and accepted. The terminal disclaimers have been recorded.

Claim/Specification Objection

1. Claims 6,12,19,26,32, and 39 are objected to because typographical error of " 30' ", " 50' ", and " 70' ", and should be --30 Angstroms--, --50 Angstroms-- and --70 Angstroms--.
2. Specification at paragraph [0009] is also objected because typographical error of " 70' " should be --70 Angstroms--.

(It is noted several attempts were made to correct the errors. However, the typographical errors are still existed for all claims and specification mentioned above, as evidently shown, for example, in attached claims 6 and 12 of the 6/13/05 amendment. Accordingly, the word --Angstroms-- should be used instead of "Å" unit symbol)

Claim Rejections - 35 USC § 112

3. Claims 8-14,21-34 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Original specification (including specification pages 7-8) teaches "...hardening the at least one exposed area of the oxide layer ..." so as to form the partially hardened gate oxide layer comprising a hardened portion and non-hardened portion, but the original specification does not support for, "...conducting a first remote plasma nitrogen treatment to create at least one

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partially hardened area within the oxide layer and at least one nonhardened area..." (as recited in base claims 8,14,21,28,34).

Dependent claims are rejected as depending on rejected base claims.

(In Amendment filed June 13, 2005, claims 1,4,15,21, and 35 were amended by deleting the term "partially". However, deleting "partially" in other base claims such as claim 8 (at line 8), claim 14 (line 8), claim 21 (line 7), claim 28 (line 8) , and 34 (line 8) has been apparently omitted. Thus, the rejection of these claims are repeated and maintained).

Double Patenting

4. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

5. Claims 1-7 and 15-20 are rejected under 35 U.S.C. 101 as identically claiming the same invention as that of claims 1-7 and 15-20, respectively, of the U.S. Patent No. 6,699,743. This is a double patenting rejection, since the respective claims are identical.

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Allowable Subject Matter

6. Claims 35-40 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

Applicant's amendment and accepted terminal disclaimers filed on June 13, 2005 have overcome the rejections of claims 35-40 in the last office actions. The references of record including Aronowitz (6,033,998), Wang (6,017,808), Chau (6,087,236), etc., alone or in combination, do not anticipatively disclose each and every aspect of the claimed method, or

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fairly make a prima facie obvious case of the claimed method, in combination with other processing claimed limitations as recited in base claim 35, the inclusion of forming a resist over at least a portion of an oxide layer formed over a substrate; patterning the resist to create at least one exposed area of the oxide layer having a first thickness; hardening the at least one exposed area of the oxide layer using a remote plasma nitrogen hardening treatment; processing the substrate and the oxide layer to create at least one P-channel device having a hardened oxide and an array of N-channel devices, each of the N-channel devices included within the array having a nonhardened gate oxide; forming a second resist over at least a portion of the oxide layer; patterning the second resist to create at least one exposed area of the oxide layer; and conducting a second remote plasma nitrogen hardening treatment to create at least one second hardened area having a second thickness and at least one non-hardened area within the oxide layer.

Response to Amendment

** Applicant's remarks filed June 13, 2005 with respect to other pending claims have been considered but are moot in view of the new ground(s) of rejection.

** Re claims 1-7 and 15-20, deleting "partially" in claims 1,4,15,21, and 35 would overcome the rejection under 35 USC 112, first paragraph. However, currently amended claims 1-7 and 15-20 are respectively identical to patent claims 1-7 and 15-20 of the 6,699,743 Patent.

** Re claims 8-14, noted that, by similarly deleting "partially", claims 8-14 would be identical to patent claims 8-14 of the 6,699,743 Patent.

** Noted that filling of terminal disclaimers (as already of record) cannot overcome a statutory type (35 U.S.C. 101) double patenting rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael M. Trinh whose telephone number is (571) 272- 1847. The examiner can normally be reached on M-F: 8:30 Am to 5:00 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number is (571) 273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

-Oacs-102-



Michael Trinh
Primary Examiner